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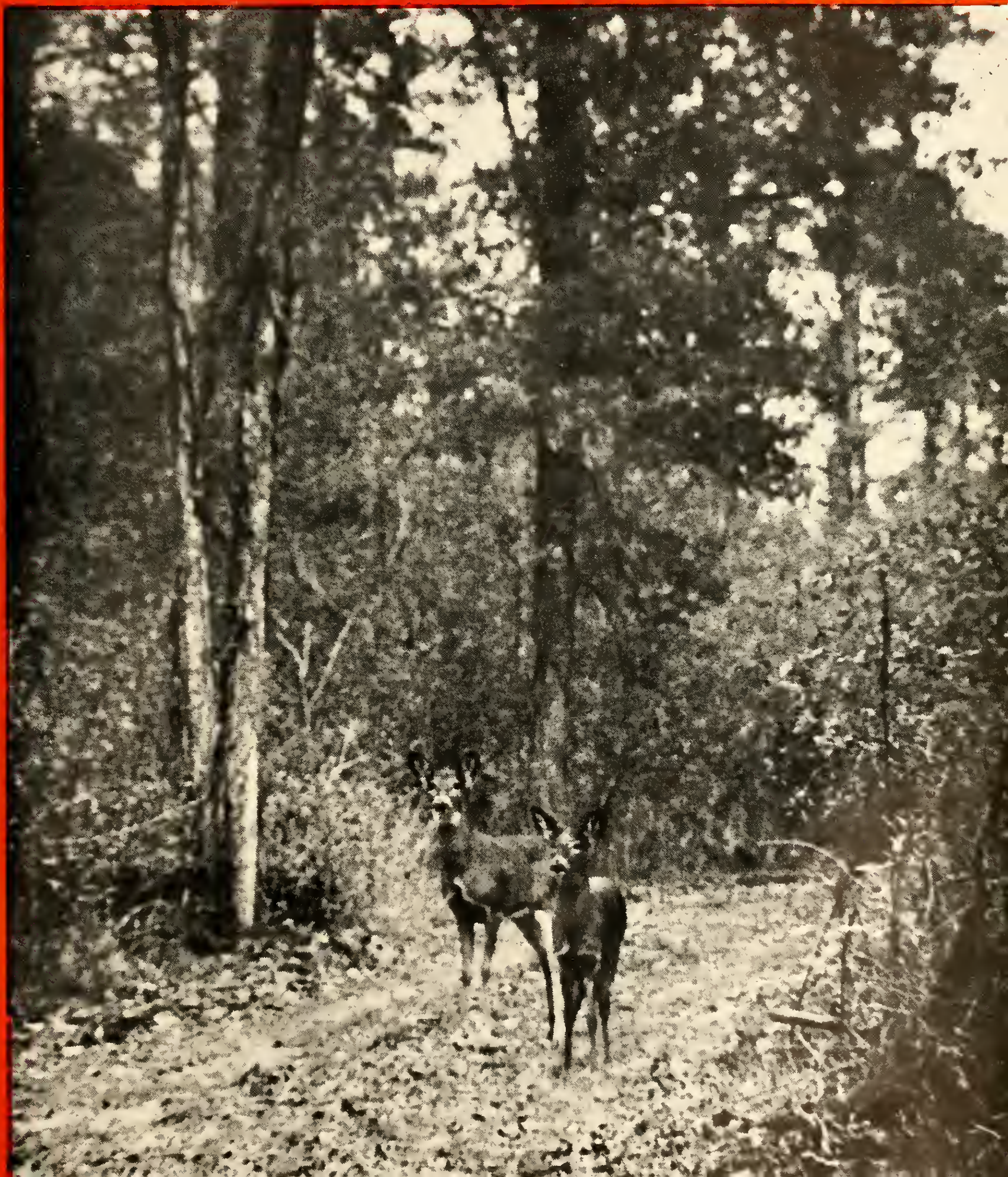

Louisiana CONSERVATIONIST

EARL K. LONG
Governor of Louisiana

ERNEST S. CLEMENTS
Director

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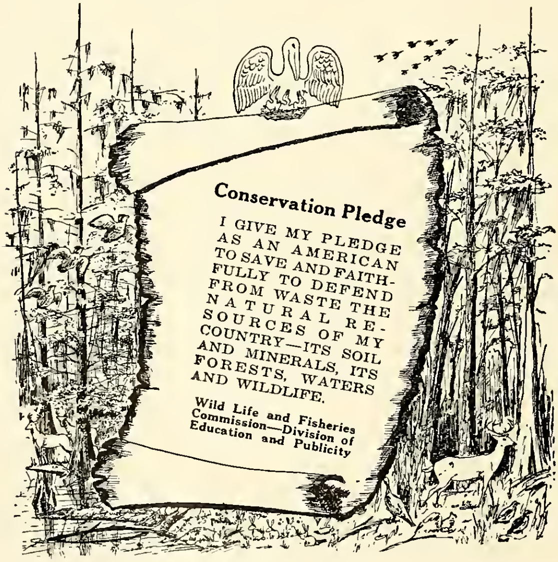

Conservation Pledge

I GIVE MY PLEDGE AS AN AMERICAN TO SAVE AND FAITHFULLY TO DEFEND FROM WASTE THE NATURAL RESOURCES OF MY COUNTRY—ITS SOIL AND MINERALS, ITS FORESTS, WATERS AND WILDLIFE.

Wild Life and Fisheries Commission—Division of Education and Publicity

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VOL. 8, No. 12

EDITORIAL

NOVEMBER, 1956

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THE COVER

These two Wisconsin deer stop to pose for photogrgapher Jack Britt before taking off for their new Louisiana home.

By Ernest S. Clements
Director
Louisiana Wild Life and Fisheries Commission

On December 14 I will step down for the third time as executive administrator for Louisiana's Department of Wild Life and Fisheries. It has been my great privilege to have been appointed three times by the same governor, Earl K. Long, to this position and because of my sincere devotion to conservation and the protection and restoration of all Louisiana's natural wildlife resources, I have tried to fullfill my obligations to the governor and all the people of Louisiana in such a way that our future generations may enjoy the same sports afield that I have experienced. Whatever success I may have had, if any, in this work, is due almost entirely to my constant love of hunting and fishing, and my desire to provide the same pleasures for everyone else in our state.

I go from this work to an entirely new field of endeavor with mixed emotions, but with a firm resolution to continue my efforts for the betterment of all Louisiana—only the future can determine what the result will be.

From the time that I, as a little boy, was taught to hunt and fish by my father, I have had an all consuming love for Louisiana's wildlife and its conservation. As commissioner of the Department of Wild Life and Fisheries in 1939 and again in 1948 through 1952, and as director of the Louisiana Wild Life and Fisheries Commission during the last six and one-half months, my entire time has been spent in an economic administration of our natural wildlife resources and at no time has my task been an easy one, as I have had to put an end to waste, renovate and repair virtually all physical assets, and plan and establish new programs. As I step down now I have the satisfaction of knowing that every bit of equipment, boats, airplanes, buildings and even the general office have undergone repairs and replacements, making this state agency one of the best kept, best staffed, and best housed in the state.

I am most grateful that I have been privileged to enjoy the full cooperation of every member of the Louisiana Wild Life and Fisheries Commission, and although I am saddened by this parting, I am enheartened by the knowledge that my successor is one of the finest gentlemen in the state, an outstanding businessman and a sincere conservationist. It is coincidental and could be prophetic, that his name is the same as mine, minus the "s". As the conservationists and sportsmen of the state become better acquainted with Lamar Clement, I have no doubt that he will enjoy their full confidence, respect, and cooperation.

In parting I offer this heartfelt pledge; I will always do everything in my power to make it possible that our future generations will have the opportunity to enjoy their sports afield as we have enjoyed it.

BAYOU LAFOURCHE BOON TO SOUTH LOUISIANA

BEAUTIFUL BAYOU LAFOURCHE, which wends its way 120 miles from the Mississippi River through South Louisiana to the Gulf of Mexico, has offered new hope to the people of that section since fresh water from the Mississippi River is being pumped into the bayou.

Fresh water, pumped from the Mississippi river into winding Bayou Lafourche, has given new hope to this section of South Louisiana.

Since shortly after the turn of the century, the bayou which wends its way 120 miles from the river at Donaldsonville to the Gulf of Mexico has been dammed at the river as a flood control measure.

About this time a number of canals were dug in the interior to function as tributaries to the bayou in supplying fresh water to the area and to relieve salt water intrusion.

During the years that followed, the area adjacent to Bayou Lafourche had grown into one of the most intensely populated areas of the nation. The supply of fresh water from the canal tributaries had ceased to be adequate during this time.

Drinking water for the thousands of inhabitants of the area became a problem. Deep water wells south of Napoleonville are useless for drinking purposes because the water is too brackish. And, even around Napoleonville, the iron content of the water is so great that water pumped from wells will stain fixtures within a couple of weeks.

Thibodaux solved its problem of water for household use in 1930 by laying a 17-mile pipeline to the Mississippi river and building a filtering plant. But, it's a costly operation, and city officials have had to crawl out of bed in the wee hours of the morning during high water seasons to go to the river to rescue their pumps.

There were few fish in Bayou Lafourche, and residents feared disease from its stagnant and polluted waters. Water was so scarce for industrial use that at least one of the several sugar mills that are the lifeblood of this section of South Louisiana had to close temporarily for a few days in the height of the cane harvesting season. And, the mills, using water from Bayou Lafourche had expensive equipment repairs and water treatment costs.

In 1955, the State Department of Public Works completed construction of a pumping station on the river at Donaldsonville. The results were revolutionary for the friendly folk along the bayou.

The three vertical centrifugal pumps can each take 45,000 gallons of water a minute from the river and transfer it into Bayou Lafourche.

Prior to this installation at Donaldsonville, older pumping stations had pumps mounted on barges directly over the surface of the river. It was difficult to maintain discharge lines because of the great rise and fall of the river.

In order to eliminate this problem, engineers designed the pumping station in a unique fashion. On the batture between the river and the levee, a reinforced concrete pit was constructed in which the pumps were permanently mounted. Water freely flows into the pit from the river through huge pipes, sixty inches in diameter, which are laid underground to the pit. From the pits the water is pumped through 48-inch diameter discharge lines into the head of the bayou approximately 900 feet from the levee on the west bank.

As the water level of the river rises, so does the level of water in the pit. Using the pit as a water reservoir eliminates the problem of treacherous currents, eroding or caving banks, driftwood and other factors which could cause foundation problems and maintenance costs to skyrocket.

The costly pumping equipment is installed high, dry and permanent, away from unpredictable river levels and currents.

This arrangement has attracted attention of some of the country's top engineers up and down the Mississippi, who have marveled at the pioneering siphon principle on which the pumping station operates.

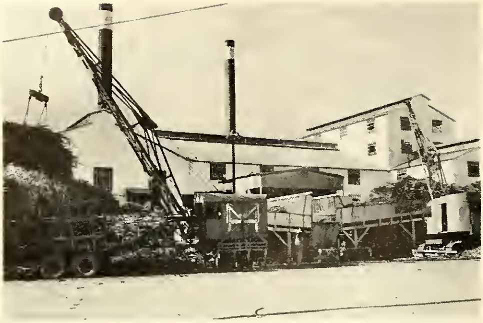
And, the pumping plant has assured many advantages to the Bayou Lafourche fresh water district—an area 4200 feet to the right and left of the bayou's center line.

At present approximately 160 miles of distribution lines are serviced with water taken from the bayou on the left descending bank one mile above Lockport through the intake of the Lafourche Parish Water District No. 1 filtration plant. The water district services the communities of Golden Meadows, Raceland, Lafourche Crossing, St. Charles, Mathews, La Rose, Cut-Off and Galiano.

THIBODAUX looks forward to pumping water from Bayou Lafourche as the source of water for household and industrial use. At present, water is pumped from the Mississippi River through a 17-mile pipeline to the filtering plant of the Thibodaux Water Works.

One of the eight sugar mill owners along the bayou says the fresh water saves his plant $3500 a year in chemicals alone which were formerly required to treat the water from the bayou to make it suitable for industrial use, and another $5000 on repairs to pipes and boilers in his mills. These sugar mills each use about 12,000,000 gallons of water a day during the approximately 70 days each year they are in operation.

INTRODUCTION OF FRESH water into Bayou Lafourche has turned this once stagnant Louisiana stream into a recreational stream for residents of South Louisiana. Boating has become popular, and fishermen brag about the size of the fresh water fish they snag from the bayou.



SUGAR MILLS, like the Lafourche Sugar Company near Thibodaux use a great volume of water in processing of sugar cane. Note flow of water in center of photo, where cane is washed by water pumped from Bayou Lafourche.

And, the fresh water from the bayou assures a continued reliable source of water for any other industry which may locate along the bayou in years to come. In planning the pumping station, provision was made for a 25 per cent expansion in the capacity of the station in the future. There's open land on both sides of the bayou suitable for industrial plants.

Assumption parish plans to float a bond issue in the near future to put in a new water system, making use of water from the Bayou Lafourche Fresh Water District.

The city of Thibodaux has already voted a bond issue under which pumps will be erected to draw water directly from the bayou. This will eliminate the costly maintenance of the 17-mile pipeline to the Mississippi river.

Officials of the Fresh Water District hope to be able to eventually supply water for use in Houma and Terrebonne parish.

In addition to providing a plentiful supply of fresh water for industrial and household use, the new Bayou Lafourche offers ideal fishing. Sportsmen of the area speak in glowing terms of the catfish, bass, bream, and other fresh water fish.

With fresh water in the bayou, boating has become a popular sport up and down the stream. In fact, about 3000 pleasure boats, mostly outboards, have been bought in the area within the past two years.

Agriculture in general has benefited from this available bayou source of fresh water by using it for irrigation. Availability of fresh water has enabled a diversification of crops. The area was predominantly a cane growing area, but during the past year large acreages of rice have been planted and harvested.

"River water has already helped us greatly," says H. E. Smith, chairman of the board of commissioners of the Bayou Lafourche Fresh Water District, "and we believe we have just begun to advance in this area of South Louisiana."

Smith says the whole project shows what can be done when progressive people work together. Ascension, Assumption and Lafourche parishes put up $375,000 from a bond issue, the Lafourche and Atchafalaya Levee Boards each contributed $250,000 and the Department of Public Works put up $400,000 to build this facility on the Mississippi at Donaldsonville.

And, the people of the Bayou Lafourche Fresh Water District voted a 3-mill tax for operation and maintenance of the district, plus another 1¼-mill tax for retirement of bonds and interest on the money put up for the construction work.

Smith is optimistic about future development along the bayou. "Now that we have fresh water in Bayou Lafourche, there is no end to the accomplishments that the people of the district can achieve," he says.

NEW COMMISSIONER

Raliegh J. Pitre, boat contractor and oilman of Cut Off, has been named a member of the Louisiana Wild Life and Fisheries Commission by Governor Earl K. Long. Mr. Pitre, a former member of the Lafourche Basin Levee Board, is active in civic and fraternal affairs. He is a member of the Young Men's Business Club and the Lafourche Shrine Club. He is the sixth appointee of Governor Long to the wild life commission board.

LOST—
ONE BRINDLE CUR

by

Lemmie Lacour Maxwell

Have you ever lost a valuable hunting dog? I do not mean by his straying away, nor by death, violently or naturally, nor by having been stolen. I mean "lost", in the literal sense of the word, completely and mysteriously, and without a trace.

"Well, we have lost RAT that way.

RAT was a squirrel dog, a brindle cur, fifteen years old, stiff with arthritis, and, if one can apply these adjectives to a dog, he was quiet, unassuming, meek and humble. He was not a "trailer"—he was that rare and wonderful specimen called a "winder". He could un-erringly "smell out" a squirrel, tree him for you, and stand there baying patiently and calmly until you arrived on the scene. Never expecting a word of praise, he would locate another and another for you until you had bagged your limit. What always amazed me was that, no matter how long he had lain in the sun at home, to RAT the woods were his particular fountain of youth, even though I think he knew that he would pay for his running by being stiffer than ever for days.

In summer, at every opportunity, my husband, Odis, the eleven year old twins, Delilah and Paul, seven year old David, RAT, 'TITE, our other squirrel dog, and I take to the open road. While the human members of the family fish, swim or just laze around, the dogs wander through the woods. We hear them baying, and while Odis and Paul bemoan the fact that guns are taboo until hunting season opens, still they tell each other that the dogs need the exercise. After so long a time, when RAT and 'TITE realize they are treeing squirrels in vain, they come back, take a swim and sleep until time to leave for home.

Some time ago, we all went out to Grand Ecore, near Mansura and not many miles from our home in Bunkie. While the twins and I fished and David played "cowboy", Ois lay down for a nap and, as usual, the dogs disappeared into the woods. We could hear them baying, but in a little while 'TITE returned and stretched out beside Odis. As I didn't hear RAT baying any more, I said to myself, "He must have had to stop and rest."

The fish weren't biting that day and as the children were getting restless, I awakened Odis and asked him if he didn't think we might as well go on home.

"Where is RAT?" asked David.

"Oh, he's around," said Odis. "I'll whistle him in."

Well, for over an hour he whistled and called and circled the woods—no answering bay, no RAT anywhere.

I could tell by the look on Odis' face that he was alarmed but as David had begun crying about RAT by then, Odis suggested that we go into Mansura for a sandwich reasuring David that RAT would come back to the water and wait for us to return and get him.

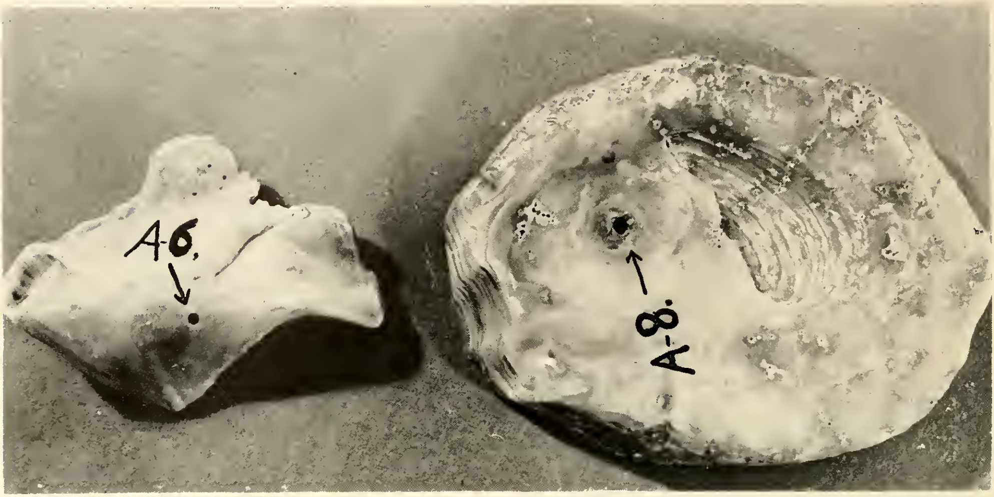
All of us were worried, but especially David. He kept crying like his heart would break and saying, "Daddy, RAT would have answered you. We'll never get him back." Odis and I silently agreed with him but we still had hope that we could find him.

After we had eaten, we did go back and whistle and call and Odis and Paul circled the woods again and again for over two hours, but to no avail. We never found him.

Odis has advertised, has given RAT's description to the wildlife agent, has inquired in Mansura, which

Continued on page 17

OYSTER PESTS OF PAST AGES



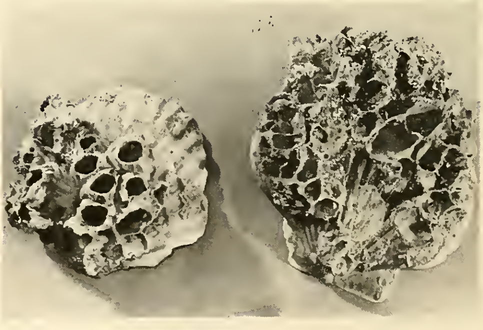
Left, piece of scallop shell, *Pecten*, from Yorktown, Va., fossil beds showing hole (A-6) made by the predatory snail, *Drillia*, of the *Miocene* period. Note the clean cut and perfect circle. Right, oyster shell from the same beds showing hole (A-8) made by a boring clam, *Martesia*. Note the imperfect circle and the blistered area around the hole, indicating that the break through occurred while the oyster was living and a repair was made. The membrane of the blister was subsequently destroyed by erosion. The small borings are from sponges which penetrated the shells after death as no blisters were formed.

by Percy Viosca, Jr.

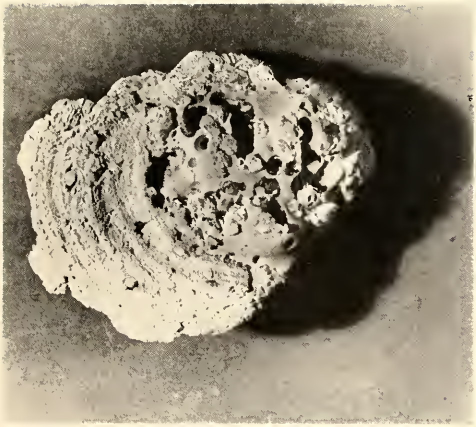
Hundreds of millions of years ago, when clammy creatures assumed an important place amongst the reef-builders of the ancient world, many of their potential pests and enemies were already established in the fauna of the seas. That these early molluscs had to struggle for existence against a variety of enemies, pests and competitors, is well attested to by the fossil record. Throughout a long period of geologic time, the shells of reef-inhabiting molluscs were incrusted with organisms of many kinds, similar to those existing today; and drill holes, tunnels and cavities made by boring species are seen in many shells. Healed injuries, evinced by shell deformities and stratified blisters, are frequent.

Let us review briefly the geological history of reef-building associations of organisms. The primary reef builders, those that contributed the bulk of the calcium carbonate to extensive formations, consisted of many species which were derived chiefly from four major groups of animals.

We learn from the science of paleontology that the first reefs were built some 450 million years ago in the *Lower Cambrian* period, by primitive sponge-like or coral-like organisms. True coral reefs appeared some 100 million years later, in the *Lower Ordovician* period. However, extensive reef building by corals did not begin until after another 50 million



Huge barnacles on scallop shells from the Yorktown beds. Many species in the Yorktown *Miocene* assemblage, including the oysters, are noted for their huge size.

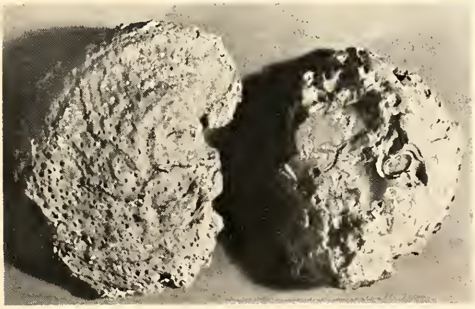


Pleistocene oyster shell from Myrtle Beach, S. C., showing *Martesia* clam borings.

years, in the *Silurian* period. It has continued for some 300 million years, and to this day, corals are still building extensive reefs and atolls in tropical seas. Associated with them, as in past ages, and contributing to the calcareous deposits, are certain types of sponges, worms, echinoderms, bryozoons (moss animals), molluscs, and algae.

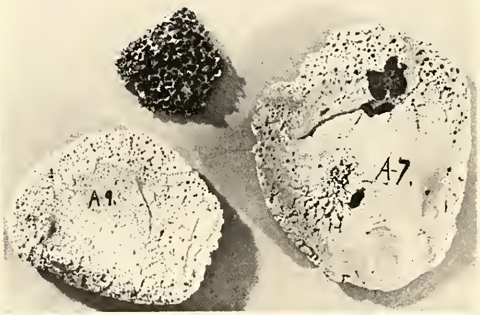
Stone lilies and sea urchin relatives were also important rock builders of the past. These spinous creatures (echinoderms) appeared on earth about 450 million years ago, early in the *Cambrian.* The stemmed forms (stone lilies or crinoids) flourished for about 300 million years, throughout the *Paleozoic* era, becoming rare and largely replaced by free moving species after that time. The writer is familiar with extensive beds of stone lily (crinoid) stems in the caves of northern Arkansas. They resemble the rattles of millions of rattlesnakes and the guides actually believed they were rattles.

Bryozoa and lamp shells (Molluscoidea) appeared about the time of the corals, in the *Odovician,* and soon became one of the primary producers of reef material. The lamp shells, although relatively rare today, were not only common on ancient coral reefs, but built extensive reefs of their own. They had many shell incrusting pests, sometimes to the point of obscuring their own surface features.



Work of two distinct species of boring sponges, *Cliona,* in *Exogyra* shells from Arkadelphia fossil beds. Small tunnels on left, large tunnels on right. Fossil clay has replaced the sponge material which originally occupied the networks of tunnels.

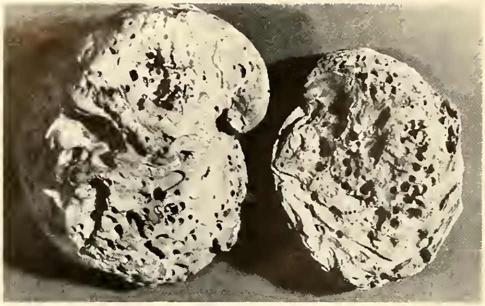
The first reef producing molluscs were here some 400 million years ago in the *Cambrian,* and bivalve types have been important reef builders down to this day. They were not without adversities, however, and often had to hold on tenaciously in environments populated with all manner of enemies and pests. Since their very beginnings, bivalve shells have been incrusted with calcareous algae, sponges, corals, worm tubes, and other molluscs; and sooner or later, lamp shells, incrusting bryozoons, and barnacles joined the assemblage. Broken and eroded shells and drill holes are evidence of the mode of death of many of these fossil molluscs. Tunnels leading to shell deformities and healed blisters indicate survival of the more hardy individuals by the sealing off of wounds. If this defense mechanism had not been developed at an early stage in the evolution of the Mollusca, it is doubted that they could have survived in the fierce struggle for existence.



Upper, piece of oyster shell from Yorktown beds showing Cliona sponge borings in advanced stage when the shell breaks into fragments. Left (A-9), oyster shell from the same beds showing advanced borings of a smaller species of sponge which cause the edges to chip off. Right, (A-7), oyster shell from the same beds showing *Cliona* sponge borings in various stages but not as advanced as in A-9. The large cavities are from the boring clam, *Martesia.* Pieces of the fragile shells of these boring clams were present in two of the cavities.

Some bivalve molluscs began to lose their symmetry and become oyster-like about 100 million years ago, in the Jurassic, but oysters similar to those of today, date back a mere 50 million years to the *Cretaceous* period. In spite of their recent evolution, modern oysters are still bothered by pests and enemies of many kinds, and of late the human species has been added to the list.

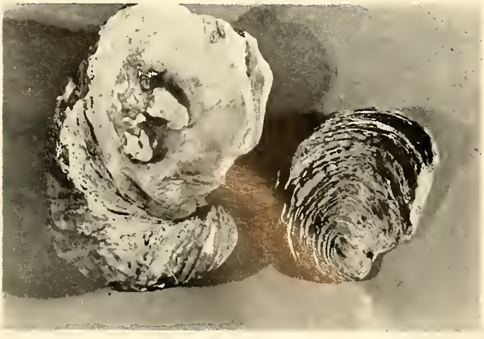
In addition to the massive rock formation developed by the four primary producers of reef material discussed above, there was much calcium carbonate deposited by other organisms, either on the larger reefs in association with the primary reef producers,



Two valves of a large *Exogyra* oyster from fossil beds near Arkadelphia, Ark., showing excavations made by boring clams, *Martesia.*

or as a component of bottom sediments. These might be termed secondary producers of reef material. With a few exceptions, the various types are still in existence today. Among this secondary group of organisms, whose biochemical activities produce lime rock or limey deposits, are certain species of bacteria, plankton plants and other marine vegetation, single celled protozoons which produce the calcareous globigerina ooze, and a succession of multicellular forms which will be discussed below.

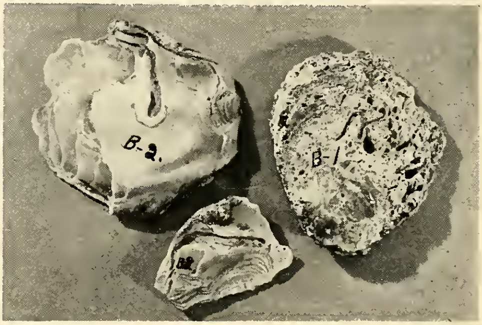
A wide variety of animals also make use of reef materials for excavating protective burrows, and some algae actually live within the stony materials. Early in the earth's history such organisms must have learned to burrow in calcareous muds for protection. Acid secretions, which dissolved away some of the lime, aided in the excavation of this material. Some animals must have developed primitive rasping organs, or employed a combination of biochemical and mechanical means. When the more massive reefs of calcium carbonate developed, a variety of boring organisms were ready to take advantage of the increasing supply of this material. With competition keen, some species learned to bore into the shells or calcareous supports of living animals.



Huge Oyster, *Exogyra ponderosa*, from Upper Cretaceous beds near San Marcos, Texas; cupped valve on left, flat valve on right. Some of these weigh as much as ten pounds. The small dark slots (left center) in the shell at left are openings of *Polydora* mudworm tunnels. The large number of laminations in these shells indicate that these oysters lived to a great age, perhaps 25 years or more, unless there were more than one interruption of growth per year.

Many reef-inhabiting creatures produce shells, others secrete calcareous tubes in which they are free to move about, and still others cement hard particles together to form coverings or cases of various kinds. Their bodies, being soft, leave no fossil remains, but the harder structures in which they reside are fossilized and become part of the geological record. The nature of the organisms which inhabited protective structures, borings or excavations of past ages can only be surmised by comparison with similar structures produced today by living organisms.

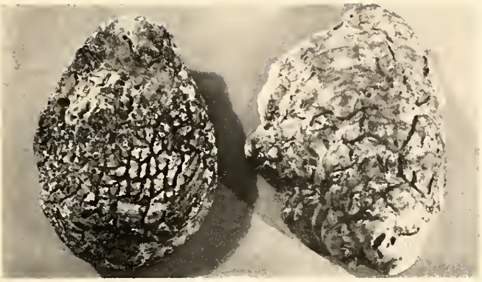
The sponges, noted for their great antiquity, have both lime producers and lime eroders among their members. Both calcareous sponges and boring sponges are common reef inhabitants. The writer has gathered a collection of fossil oysters showing characteristic sponge borings dating as far back as the *Upper Cretaceous* formations of Alabama, Arkansas and Texas. Because sponge growths may infest shells after death and in time consume over 50% of the material, they often obliterate evidence of other shell borers. Consequently, in the fossil material, boring sponges are more in evidence than other shell-boring organisms.



Flat valves of fossil oysters from Yorktown *Miocene* beds, showing sculpture by huge mudworms, *Polydora.* Inner surface (B-2) at left, outer (B-1) at right. The small piece (B-2) lower center was chiseled off the shell at upper left to expose blisters and borings. Note the laminations (year marks) of the broken shell at the left. The mudworm tunnels follow the laminae. The twisted sculpture on the right shell (B-1) was done by worms; the large rounded holes by boring clams, and the smaller holes by boring sponges.

Worms, too, are very primitive creatures which antedated the Mollusca. Their burrows and borings appear in sediments deposited for 450 million years, from the *Precambrian,* and their work is much in evidence for the past 300 million years, from the *Silurian* to the *Present.* Calcareous worm tubes appeared about 350 million years ago, in the Ordovician, but worms, like sponges, are more noted as reef eroders than as reef builders.

The author's fossil collection shows characteristic mudworm borings of the *Polydora* type in shells

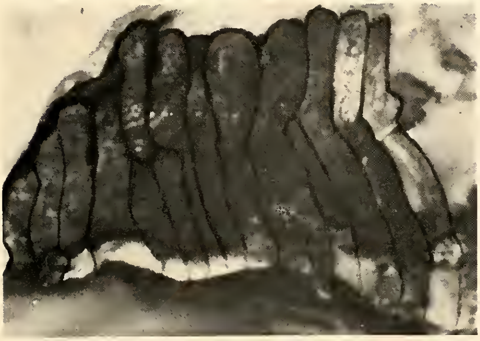


Sponge sculpture in Yorktown fossil oysters. Note the reticular pattern of these borings. There were, no doubt, a number of species of boring sponges in *Miocene* time, indicated by the different sizes and patterns of the tunnels.

dating back to the *Upper Cretaceous*. That these borings were made while the molluscs were actually living and not after a later exposure of the shells, is indicated by the nature of the shell blisters and laminated cavities deep within the shell structure.

We have seen that some echinoderms were among the great reef-builders of the past, but starfishes such as we study in the biology laboratory are noted as reef modifiers because of their predatory habits. Some species are serious natural enemies of the oyster to this very day, and we in Louisiana are fortunate that they do not live on our reefs.

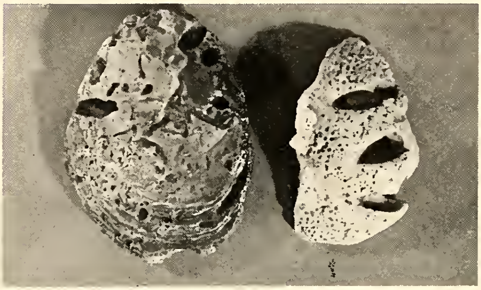
The major group of segmented animals, the Arthropoda, made its entry in the *Late Precambrian,* well over 400 million years ago. One large group, the trilobites, became extinct over 150 million years ago, only to be replaced by more modern marine arthropods, such as the crabs and shrimps of the class Crustaceae. Although crab-like creatures appeared in the early *Cambrian,* the true crabs, important potential enemies of the oyster, did not appear until about 100 million years ago, in the *Jurassic,* contemporaneous with the early oysters. The barnacles are a group of ancient but degenerate crustaceans which appeared in the *Ordovician* period. They were incrusting reefs of various kinds for over 200 million years before the appearance of the oyster.



Small Polydora (mudworms) invaded the heavy shells of huge oysters, *Exogyra,* of the *Upper Cretaceous* period. Upper region of photo shows laminae of the oyster shell. By dissolving the inner shell layers with dilute hydrochloric acid, the mud tubes, not soluble in acid, were exposed in their original position as they were built by the worms, some 50 million years ago.

Even the fishes invaded the seas long before modern oysters came upon the scene to serve as part of their food supply. They were here in the *Devonian,* 250 million years ago, about 150 million years before the oysters.

Assymetrical oysters, the modern type, then, are comparatively new in the geological time scale. They evolved from clam-like ancestors a mere 100 million years ago, in the *Jurassic* period, in an en- pests and enemies. We have learned from the fossil record, that most of these pests and enemies had a vironment already cluttered up with all manner of previous existence on this planet of some 100 to 300 million years before the oysters came. Imagine the patience of these potential enemies that had to wait for ages for a taste of "the succulent bivalve."



Oyster shells from the Yorktown fossil beds showing cavities made by large *Martesia* clams and smaller borings by *Cliona* sponges.

I am grateful to paleontologists Alan Cheetham and Robert Waldron for reading the preliminary manuscript and offering some valuable suggestions.

Tails serve animals as fly swatters, as signals, as instruments of communication, as extra hands and tools of many uses.

* * *

Snakes do not have eyelids. Even when it's asleep, a snake's eyes are wide open.

* * *

Florida's Everglade Kite is considered to be the third rarest bird in America. It eats only fresh water snails and when the snails are destroyed by drying up of their marsh homes, the kites must move elsewhere.

* * *

A centipede does not have a hundred legs. A common house centipede has 15 pairs. Garden centipedes have 21 and some other centipedes have anywhere up to nearly 200 legs.

Hurricane Damage to Fur Industry

by F. J. Webert

The Mississippi River, born in the colder northern climes, has over the years, taken advantage of its normally docile recipient and extruded one of the world's longest deltas that from a map looks like a giant thorn imbedded in the shoulder of the Gulf of Mexico.

Through the ages the mingling and clashing of the extreme environments of fresh and ocean waters—with the help of man and local geophysical conditions—has made this alluvial thorn one of the world's most productively exploited regions of natural resources.

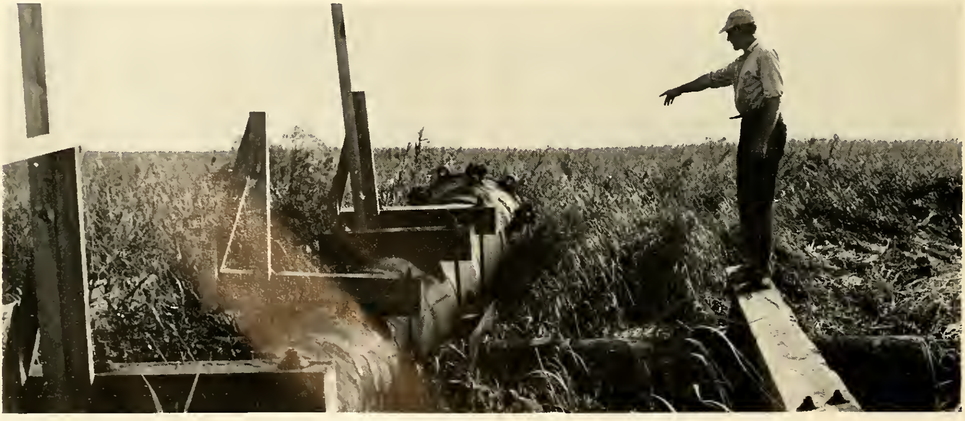
Seemingly, in revenge every few years a tropic-born fury of wind and waves whirls up as if to purge this thorn from her generator's shoulder. Hurricane "Flossy" was the latest.

Detected off the south coast of Mexico's Yucatan Peninsula at 6:00 A.M., September 21, Flossy moved northward. Pushing swollen tides ahead of her she gained hurricane intensity at 1:00 P.M. of the 23rd, about 150 miles south of the Louisiana coast, then swerved northward and by 3:00 A.M. of the 24th was pounding the marshlands east of the Mississippi River, with her counter-clockwise northeast winds.

From the Rigolets to the mouth of the Mississippi River the already swollen storm tides raced southwestward ahead of the wind inundating and recapturing over a million acres of coastal marshland for the gulf and then continued to rise and explore its way to within two feet of the very top of the Mississippi levee.

The muskrat crop was almost a total loss. Hundreds of deer and cattle were drowned. Rabbits, opossum and raccoons were dealt a severe blow also. Some mink and otter were reported drowned and signs of the former are difficult to find now. In sequestered localities representatives of the wildlife found refuge.

Along Lake Borgne the tall brackish-induced Roseau canes slowed the tides enough for some muskrat to save themselves—afforded building material for nutria platforms, and here and throughout this coastline matted together with finer vegetation into rafts upon which some animals found refuge. Deer, nutria, raccoon, mink, and water moccasins were together; all seen floating on this debris. Most of these animals died or were shot. Some floated over the banks into the Mississippi river around Pilot-



This huge section of a suction dredge belonging to the Standard Dredging Company broke loose while working in the Bay St. Louis area and disappeared for over a year until "Hurricane Flossie" hurled it into the Lake Borgne marshes beyond Violet, La.

Trucks, clearing the tons of debris from the Mississippi River levee and highway, detour around this Church that floated across the highway below Pointe a la Hache.

town and without luck were drowned when the rafts broke up in the river or the gulf.

The Shell Beach-Hopedale area was severely hit. Tides sent the water level more than twelve feet over the marsh. Wildlife, camps, boats and homes all were affected, but even here on a high oak shrouded Indian mound at the intersection of Jahncke's Ditch and Lake Borgne fresh signs were found of otter, mink, rabbit, raccoon and nutria and a high canal dump leading into Bayou la Loutre also showed signs of deer, still alive.

The ribbon of land from Phoenix to Pointe a la Hache and beyond, past Baptiste Collette, besides having almost every building heavily damaged was choked with thousands of tons of debris. A continuous mat of marsh grasses from one to three feet thick lay stranded for over 30 miles along the slope of the Mississippi levee topped with an assortment of trawlers and smaller boats, pilings, outhouses, oil drums, stoves, refrigerators, gallon jugs, pine cones and the remains of dead animals, especially muskrat, rails, rabbits, deer and cattle.

But much of this debris came from other areas. From the marshlands to the northeast they swept over what was once land through Eloi Bay and Lake Coquille, across the inundated levees of Bayou Terre aux Boeuf and River aux Chene, through now hidden Bay Gardene and Quarantine Bay. Then scouring out and swelling five feet over Plaquemines protective back levee to deposit its cargo of waste and destruction.

Many of these could have been saved if they had been located on the oppisite side of levee than that on which they drifted—perhaps already dead.

And luckily this situation did occur in one large area—from Lake Lery to Caernarvon to Braithwaite to Scarsdale—a good muskrat area of approximately 35,000 acres was spared the storm's direct force because of the highway going from Poydras to Yscloskey and Delacroix, which is built on top of one of the Mississippi river's ancient distributaries. Although the Delacroix Corporation, largest land owner in this area, suffered an almost total loss of a muskrat crop that promised to yield well over a million rate this year they still have an estimated crop of 300,000 pelts in this protected area. Some of these rats were washed onto lands new to them and others overcrowded into land already holding a surplus amount.

They have established new beds now in anticipation of a new crop of young and should start migrating back towards the better areas from which they came and begin the three to seven year job of repopulation.

The Delta Migratory refuge near the mouth of the Mississippi was flooded with at least seven foot tides and was scoured badly on its outer reaches around Main Pass, with a reported loss of some duck food—but the State Public Shooting grounds to the south was protected from these direct winds and received no more than four to five feet of waters. Because of this the nutria population here was saved and reported increased. Their innumerable duck ponds were flushed clean of water hyacinth and alligator grass and made available to both hunters and waterfowl. Although some of the duck foods, especially Widgeon Grass, were washed away too, most was left and now has room in which to increase.

Some other observations that might be interesting to the reader are as follows:

The only flooded areas visited that contained silt was on the marshes along the east shore of Lake Borgne. Further south and east the areas did not receive silt.

The flood waters although reaching inland to the Mississippi river levee did not leave stranded ex-

Shrimp boats that floated freely into the backyards of Pointe a la Hache were dragged back for a return trip over the now dry and eroded Protection levee.

tensive pools of salt water because most of this area has over the years developed into an area that daily receives invasions of gulf waters. Also this entire area was replenished with two to six inches of rains on the following week-end.

Although many of the brackish and fresh water plants and trees were burned by salt tides and spray, their roots were probably protected because of the short duration of the flood waters and the fresh rainfall mentioned above.

The floodwaters, generally, did not tear loose large sections of marshlands, nor create new ponds as in 1947. Neither did it scour out most of the duck foods and with the exception of the Plaquemines back levee, did not damage any man made or natural levees, for Hurricane "Flossy" tried too hard. Although destroying most of the wildlife and human possessions, she brought in too high a water that instead of scouring and washing the marshlands actually covered it quickly, like a protective blanket, from the intense hurricane winds and waves that lashed overhead. And with the environment still intact—and washed cleaner by the way—the wildlife shall return. For it is the environment itself that delimits the animal populations in a marsh and not any one particular specimen.

And as was stated initially, conflicts, past, present and future, created this productive environment — Midwest erosion, Hurricane "Flossy" and her descendants included.

Louisiana's fur industry, on the threshold of another annual harvest, still has a silver lining peeping out from behind some very black clouds.

In the marshes east of Shell Beach. This houseboat tore loose from its mooring and floated upside down for over a half mile of marsh without leaving any visible markings on the land.

The total value of last year's fur crop was $2,644,986 for the entire state and it was expected that there would be a substantial increase this year over last year's harvest, but the ravages of the elements took a heavy toll of southeast Louisiana's muskrat population and at the same time destroyed millions of acres of habitat that was expected to produce added millions of dollars to the state's trapping total.

Despite the inroads of floods in some areas and drouths in others, biologists in close touch with Louisiana's fur situation are still of the opiinon that this year's harvest will show an increase over last year.

The back rooms of this home met the same fate as many in this section around Pointe a la Hache in being swept away by the waters which left a souvenir of debris between the weatherboards as a token remembrance.

A representative picture of debris driven onto the Mississippi River levee from Carlisle, Louisiana south beyond Pointe a la Hache.

Originally the marshes located east of the Mississippi River were expected to produce a bumper crop of muskrats from the more than a million rats estimated to be in that area. After the hurricane driven waters had receded, the million muskrat population had dwindled to approximately 300,000 in the protected area located below Bayou LaLoutre. Besides destroying approximately 750,000 muskrats, the flood waters redistributed the scattered nutria located in this area spreading them more evenly and also concentrating large numbers of these animals at the mouth of the Mississippi River.

Although there has been an amazing increase in the nutria population in the Pass a Loutre country, this increase may

This tree caught some of the debris in its upper branches revealing the height of the flood waters, just east of Violet, La.

not show in this year's trappers' catch, because of the newness of the nutria to the people of that locality and because of their inability to properly trap and prepare nutria pelts.

It is estimated that the Barataria area will show an increase in the muskrat harvest this year, but the hurricane also devastated some sections of the Barataria area and concentrated these animals in other localities so that some trappers' crops have been wiped out and other trappers will have to employ additional help in taking muskrats if they are to keep their land from undergoing "eatouts" due to a heavy muskrat population. Nutria should also show an increase in this area, but whether or not the trappers take advantage of the nutria population remains to be seen. It is not believed that the otter and mink suffered any noticeable amount of damage as a result of the hurricane in this region.

The marshes surrounding Houma should show virtually the same production as last year in all fur bearing animals if a slight increase in the muskrat take. Here again there is reported that the nutria has increased in this area, especially in the lower reaches close to the Gulf of Mexico.

Southwest Louisiana, including Vermilion and Cameron parishes and part of Iberia parish, are still in the grips of a prolonged drouth and this of course reflects noticeably in the fur-bearing animal population in these territories. Although an isolated pocket of muskrat and mink has been observed to increase in the Grand Chenier area, the overall picture shows a decline in the fur-bearing animal population. Very few muskrats will be caught in

Continued on page 20

Congress to Feed Ducks–UNDGAWWW!

by James E. Mays

(WASHINGTON—Congress has formally invited wild ducks to peck away at its mountain of surplus grain.

The invitation is in the form of a bill passed by both the House and Senate. It received the President's signature July 3 to become official.)

SOMEWHERE IN THE FAR NORTH, July 10 (Delayed)—The annual convention of the United Wild Duck, Geese and Assorted Waterfowl of the Western World was called to order in this remote valley today.

The delegates, including Canada geese, mallards, pintails, black ducks, swans, and widgeons, began arriving long before sunrise.

By high noon the valley was a veritable sea of wings and shortly after 1 P.M., President Murgatroyd O'Mallard mounted the speakers' platform.

The audience honked, quacked, and flapped their wings wildly as "Murk" (as he is affectionately known) approached the rostrum.

The president stood smiling down from his perch atop a frostheaved hummock at the edge of the glacial moraine.

He waved for silence but his audience merely cheered the louder. They loved Murk.

"We're with Murk . . . migrate with Murk," they chanted in unison.

"My fellow waterfowl," he began, "I welcome you here to this inaccessible valley, beyond the range of every weapon except the guided missile.

"Many of you have journeyed far from your accustomed breeding grounds in the northern United States, the maritime and prairie provinces of Canada, and from such distant lands as Labrador and Newfoundland.

"An entirely new situation seems to face us as we prepare for the long trip southward this fall.

"In some ways," he continued, "it appears that we may have gained advantage . . . only time will tell for sure.

"The advantage to which I refer lies in a recent action by the Congress of the United States, by which some of the surplus grain owned by the government will be made available to us for free.

"The Congress has passed a bill to allow some of this surplus grain to be spread in refuges in areas where we feed heavily on farmers' fields. The idea is to keep us from destroying the grain in their fields, which we have heretofore taken as our rights as free waterfowl."

"After all," the president went on, "much of this grain was grown as surplus to be sold to the government. It was grown in the very marshes where our forefathers once nested.

"The governments of men, as all birds know, are impossible to figure out. The U. S. government paid a subsidy to farmers to drain our marshes for the planting of these grains, and then paid the farmers a subsidy to grow the grain so it could be sold to the government as surplus.

"Our organization protested the draining of our nesting areas in the northern U.S. marshes, but to no avail, and when we tried to keep from starving by feeding on the grains in the farmers' fields, we simply got shot, often illegally.

"Therefore I say to you that it is only poetic justice that we should now find the same grain spread out for us in the wildlife refuges.

"But I should caution you about one point. The grain will not be spread in a refuge unless the farmers in the given area request it through the Department of Interior.

"This poses a delicate question. It means that we are going to have to do enough damage in the fields to arouse the farmers to request help.

"So some of us are still going to have to pay the Supreme Sacrifice, but once the grain is spread the rest should have pretty easy going, able to eat heartily without venturing out under the guns of the hunters.

"This isn't going to make the hunters happy, and in a way we can sympathize with their plight, but we suggest that perhaps the hunters themselves are partially to blame for the situation.

"If you remember, many of the leading conservation organizations in the United States have been fighting a losing battle for years to keep their government from draining our marshes. But not nearly enough hunters joined them in their battle. Had they done so, the Congres would never have permitted the drainage of the marshes.

"Had the hunters worked more diligently with such organizations as Ducks Unlimited and other waterfowl conservation groups, the United States would be much nearer its goal of 4 million acres of waterfowl habitat than it is today.

"I cannot refrain then, from saying to the hunters that it is the governments of men, not the United Wild Ducks, Geese and Assorted Waterfowl, that must be held responsible for the long decline in our flyway numbers.

"We have not changed. We will still fly south in the fall, and we must, out of self-preservation, take our food where we find it.

"And until we find a joker in the deck, we extend our thanks to the Congress of the United States for helping us with the food we will need to survive the months ahead . . . until we meet in this valley at this time next year.

"I now declare this convention of the UWDGAWWW adjourned."

The applause was breathtaking.

City Duck Callers

John Eason, (left) twin brother of Albert, who finished second to his brother in the junior duck calling contest sponsored by the New Orleans Sportsmen's League.

by Steve Harmon

More than 600 waterfowl enthusiasts of the New Orleans area gathered in the McAlister auditorium recently to vie for the honors that go to winners of the New Orleans Sportsmen's League duck and goose calling contest. The outdoor affair, an annual event in the city, was broken into adult and junior divisions.

The contest was unique in that contestants actually performed their calling from a pirogue in a real duck blind that had been constructed on the stage of the auditorium. Although the judges were not able to see any of the contestants, the overflowing audience could watch the entire performance from their seats.

Buster Clesi, chairman of the sportsmen's league committee which handled arrangements for the calling contest, served as master of ceremonies of the affair and kept the show moving along at a fast but interesting pace during the evening.

In addition to the duck and goose calling contest for both adults and juniors, spectators were able to examine ducks and geese of the species found in Louisiana. An exhibit, prepared by the education and publicity division of the Louisiana Wild Life and Fisheries commission, vividly portrayed waterfowl in the Louisiana feeding grounds. Those present also witnessed a demonstration of late model shotguns and ammunition and received valuable information of scattergun shooting from Frank Moreno, New Orleans sportsman and a member of the league. Buddy Clesi gave a demonstration on the proper methods of putting out decoys that would be more attractive to ducks.

Taking top honors in the senior division of the duck calling category was R. J. Murphy of New Orleans. Second place honors in this division went to Marcel Whipple of Gretna, with Roy Head of New Orleans in third place.

Walter Kramer of Minneapolis, Minnesota, took first place in the goose calling division. Wilson John of Chalmette was second while Harry Klein of New Orleans was third.

Francis J. Uzee of Chalmette captured first place honors in the decoy division with J. C. Roussell, Chalmette second, and Wayne Frady, New Orleans, third.

Twin sons of Angus Eason, former president of the Louisiana Wildlife Federation, took first and second place awards in the junior division of the duck-calling contest; Albert taking first place honors with brother John, second. Andre Theriot of New Orleans was third in the junior division.

R. J. Murphy of New Orleans (center) who won the New Orleans Sportsmen's League ducking calling contest with Frank Moreno (left) and Gus Elmer (right) president of the league, holding the gun that was awarded along with the trophy for the winner of this classification.

Albert Eason, son of Angus Eason, past president of the Louisiana Wildlife Federation, who won the Arthur Van Pelt trophy in the junior duck calling contest. Frank Moreno (left) presented the trophy.

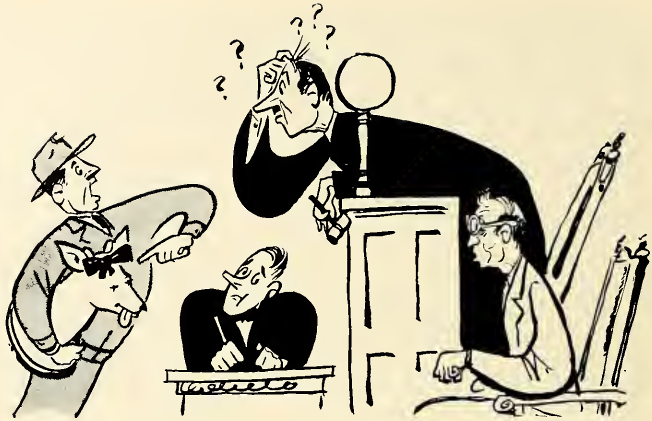
The Arthur Van Pelt memorial trophy was presented to Albert Eason for his all-around performance during the demonstrations. The trophy, to be awarded each year to the best all-around performer, was donated by rank A. Vonder Haar, New Orleans businessman and sportsman, in recognition of the late outdoor writer's interest in urging training in duck calling for young sportsmen.

Lloyd Abadie of New Orleans, vice-president of the Louisiana Wildlife Federation, served as chairman of the judges panel. Also serving as judges were C. J. Troxler, Lucien, and Harry E. Klein.

Francis J. Uzee of Chalmette (right) being presented the blue ribbon for winning first prize in the Mallard hen decoy contest. Edmond Christy made the presentation.

W. Kramer (left) of Minneapolis, Minn., being presented the trophy for winning the goose calling contest. Frank Moreno of the New Orleans Sportsmen's League made the presentation.

A BUCK IN COURT



Editor note: So you think judges of the United States District Court have no sense of humor? And that they are unbending in their dignity? Or that their opinions handed down in open court are compounded of strictly legal phrases and ponderous reason?

Well then, feast your eyes on one of the most delightful and unusual opinions ever delivered by a Federal Judge in a criminal action. U. S. District Judge Ben C. Dawkins, Jr., authored the following opinion at Shreveport recently:

IN THE UNITED STATES DISTRICT COURT
FOR
THE WESTERN DISTRICT OF LOUISIANA
SHREVEPORT DIVISION
CRIMINAL ACTION
NO. 14,098
UNITED STATES OF AMERICA
VS.
ALVIN DOWDEN

FOR THE GOVERNMENT
MESSRS.
T. FITZHUGH WILSON
UNITED STATES ATTORNEY
SHREVEPORT, LOUISIANA

Q. L. STEWART
ASSISTANT UNITED STATES ATTORNEY
SHREVEPORT, LOUISIANA

FOR THE DEFENDANT
WATSON AND WILLIAMS
110 ST. DENIS STREET
NATCHITOCHES, LOUISIANA
DAWKINS, JR., CHIEF JUDGE

RULING ON MERITS

A tiny tempest in a tinier teapot has brought forth here all the ponderous powers of the Federal Government, mounted on a Clydesdale with Lares and Penates flying, in hot pursuit of a private citizen who shot a full-grown deer in a National Forest.

Not content with embarrassing defendant by this prosecution and putting him to the not inconsiderable expense of employing counsel, the Government has compounded claumny by calling the poor dead creature a "fawn". Otherwise fully equipped with all the accouterments of virile masculinity, the deceased, alas, was a "muley". Unlike other young bucks, who could proudly preen their points in the forest glades or the open meadows, this poor fellow was foredoomed to hide his head in shame: by some queer quirk of Nature's caprice, he had no horns, only nubbins, less than an inch in length.

Instead of a quietly private interment and a "requiescat in pacem", which decency should have dictated as his due, the Government has filed his blushing head in evidence for all to see. Pointing to the lack of points, to prove its point, it now insists that whatever his status may have been in other climes, in Louisiana our departed friend is officially puerile.

All this—requiring the services of five game agents, two biologists, the opposing attorneys, the United States Marshal, and three Deputies, the Clerk, Court Reporter, and a Federal Judge presumably above and beyond the call of politics—stems at least partly from the failure of the Louisiana Legislature to reckon wisely with the exceptional or unusual.

Prosecution proceeds upon 18 U.S.C.s which provides:

> "Whatever within or upon any of the places now existing or hereafter reserved or acquired as provided in section 7 of this title, is guilty of any act or omission which, although not made punishable by any enactment of Congress, would be punishable if committed or omitted within the jurisdiction of the State, Territory, Possession, or District in which such place is situated, by the laws thereof in force at the time of such act or

omission, shall be guilty of a like offense and subject to a like punishment."

The Louisiana Revised Statutes, Title 56:124 (1), stipulate, in pertinent part:

> "No person shall:
>
> "(1) Take any *fawn (a deer with horns less than three inches long)* or any doe (a female wild deer), at any time; or a wild deer at any time when driven to high lands by overflow or high water." (Emphasis supplied.)

Evidently relying on some uncanny prescience instead of his eyesight for his judgment of the deer, or perhaps having trusted to luck—which was with him—or proper profile view, defendant slew the animal at some forty paces in the Kisatchie National Forest on December 10, 1953. Soon the law had him in its clutches, but obviously because the authorities were unsure of their ground, formal charges were not filed here until February 24th, 1955. Meanwhile, a State Grand Jury, having jurisdiction over the heinous offense, had refused to indict. Trial in this Court has been delayed until now by slightly weightier matters and by several continuances engendered by fruitless efforts of counsel to stipulate the facts.

Finally and inexorably, jury trial having been formally waived and that expense at least having been avoided, Nimrod's case has been heard and he is found *not* wanting:

The Government's own evidence showed without dispute that

1. The object of our inspection was not less than sixteen months, nor more than eighteen months, old.

His teeth told the tale.

2. He was no doe, or psuedo-doe. *All* witnesses agree on this.
3. Except for his unfortunate looks, which he couldn't help, he was "all man". He could have and may have become the father of a fawn.
4. He weighed some 90 to 100 pounds on his cloven hooves, and 57 pounds dressed, or rather, undressed. Deer on Government lands apparently aren't as well nourished, and don't grow as large, as elsewhere.
5. Biologically he was a buck, not a fawn, who in strictly female company would have had to bow to no critic. His handicap actually was one only upon having to fight for the affections of the distaff side. What he lacked in weapons, he could have made up for in celerity, dexterity or finesse.

In all *important* respects, therefore, notwithstanding the Louisiana Legislature, which may be forgiven for its ignorance, Buck has been grossly slandered. He never should have been dubbed arbitrarily as a "fawn". He was no baby and was not even a sissy.

It necessarily follows that if Buck is not equally guilty, neither is Alvin, who is ACQUITTED AND DISCHARGED *sine die*.

THUS DONE AND SIGNED, in Chambers, in Shreveport, Louisiana, this 5th day of April 1956.

/s/ BEN C. DAWKINS, JR.
UNITED STATES DISTRICT JUDGE

Two species of wild swan are native to America, the Whistling Swan and the Trumpeter Swan.

* * *

The white stork, one of Europe's best-loved birds, is so tall that when the young are two feet high they are still babies and need their parents' care.

LOST—ONE BRINDLE CUR

Continued from page 5

he visits every other day on his regular milk run, has even gone to Old River landing searching, directly across the woods from Grand Ecore, but so far there has not been a clue nor a trace.

If RAT were living, he would have come home by now. We think he simply had a heart attack and died instantly out there all alone. I almost hope he did. I couldn't bear to think that he could hear us calling and wasn't able to answer, and that he just had to lie there without food or water until he died.

I hope he has found a place of "refreshment, light and peace." If there is a dog heaven, I know he is there—young and supple again—strong teeth with which to gnaw bones—plenty of squirrels to tree for a huntsman—open season all the time and no bag limit.

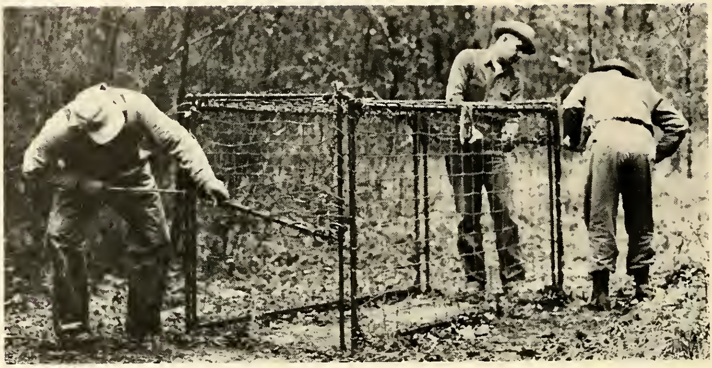
. . . And this is What a Geese Is . . .

In the realm of youthful observations on waterfowl, consider this recent essay turned in to a teacher by a teen-age naturalist. He titled it: "And This is What a Geese is".

> "Geese is a low, heavy set bird which is mostly meat and feathers. His head sits on one side and he sits on the other. Geese can't sing much on account of dampness of the moisture. He ain't got no between-the-toes and he's got a little balloon in his stummick to keep from sinking.
>
> "Some geese when they get big has curls on their tails and is called ganders. Ganders don't haff to sit and hatch but just eat and loaf and go swimming. If I was a goose I'd rather be a gander."

—*Ducks Unlimited Quarterly*

Trap Deer For Transplanting In Sparse Areas



Field personnel of the Fish and Game division of the Louisiana Wild Life and Fisheries commission put the finishing touch to a new type nylon mesh deer trap which will be used to trap deer in five sections of the state. It is anticipated that this new type trap will double the number of deer trapped last year.

by Mel Washburn

THIS winter, the Louisiana Wild Life and Fisheries commission, through its Federal Aid in the wildlife restoration program, expects to trap between 600 and 700 deer in heavily populated areas and transplant them in localities where the deer population is either extremely sparse or entirely extinct. The principal purpose of the trapping operation is to provide deer for the restocking of areas which are presently devoid of deer or which have such a low population that release of deer are warranted in order to provide a harvestable surplus of deer after a reasonable length of time.

The areas in which deer are to be trapped are in Madison and Tensas parishes, Zemurray Park, in the Florida parishes, the Red Dirt wildlife management area, and, Avery Island. Approximately 160 traps will be set in the Madison-Tensas parishes area; 40 traps on Red Dirt; 20 traps in Zemurray Park; and, 20 traps on Avery Island. Due to improvements in a new type of deer trap which is made of nylon netting, the total number of deer expected to be taken during the present season should at least double the number trapped last year. This new nylon netting trap, however, is not the only type of trap that will be used. The old standard type of trap which has been used for many years will be used again and in some of these areas it is expected that these will be as effective as they have been in the past.

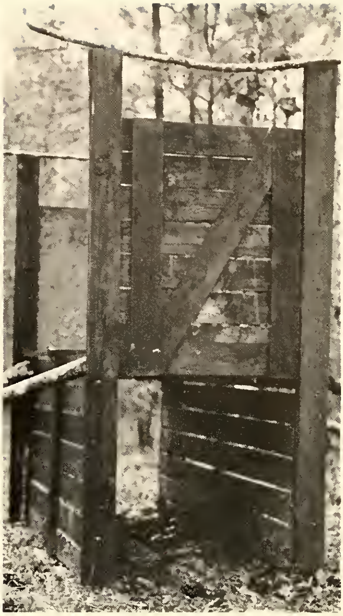
Regardless of the type of trap that is used, the capture of deer by this method is, and has always been, unpredictable. And, of course, there is no way in which only certain kinds of deer may be taken exclusive of all others. It is hoped that a preponderance of does will be captured, especially in the Madison and Tensas areas, as the doe population in these sections has become extremely large. The Wild Life and Fisheries commission is thoroughly aware of the overbalanced doe population but is extremely reluctant to declare a doe season, preferring to trap out and transplant the excess.

The deer trapping program has been underway in varying degrees in Louisiana since 1949 and at the present time a majority of the areas in the state which can qualify as deer release points have been successfully stocked. In these districts it is now entirely up to the people of these areas to protect these releases and thereby insure the success of this restocking program. Game management experts in the Fish and Game division explain that it is only through the cooperation of the people that such a program can be successfully carried out.

These adult deer are about to be released in an area where the population is scarce. Cooperation is asked of the people of the area where deer are released to insure the success of the restocking program.

During the trapping season of 1955-56, 306 deer were trapped and transplanted in

One of the recently acquired Wisconsin deer being released in Louisiana. Release crates as shown above are used while transporting animals to release site.



Above is the old standard wood type of trap which has been in use since 1949 in the trapping of deer in Louisiana and which will again be used this season.

Louisiana on some ten different release sites. This year deer are scheduled to be released in the following parishes:

Lincoln, Calcasieu, Bossier (Ward 5), Bossier-Webster, Webster-Bienville, Vernon, Jackson, St. Helena-E. Feliciana, Red River-Bienville, Ouachita (D'Arbonne area), Union (Carney Forks), Richland (Lafourche), and Avoyelles (Moncla-Archie area).

Habitat requirements which are necessary in order to qualify an area as a deer release point are:

(1) The area must be at least 10,000 acres in size.

(2) The area must support an adequate supply of native deer food plants.

(3) The area must be closed to deer hunting for a period of five years or five breeding seasons from the date of the last release.

In addition to the deer trapped in Louisiana and transplanted, the Fish and Game division of the Louisiana Wild Life and Fisheries commission is importing 50 deer from Wisconsin to be released in various parts of the state in the hope that an infusion of new blood will prove beneficial to Louisiana's native deer population.

In addition to the transplanting operations, the capture of deer in traps in the various areas gives the game management men and biologists an excellent opportunity to study closely the specimens taken and provide a wealth of physical information that will be extremely valuable in the planning of future deer management programs.

The building up of Louisiana's deer herds in every section of the state is of paramount importance to the Wild Life commission as well as the possibilities for future hunting and it is hoped that eventually, through these methods, there will be a harvestable surplus of deer in every part of the state.

Trapped deer in the various areas gives the game management men and biologists an excellent opportunity to study closely the specimens taken and provide a wealth of physical information that will be valablue in the planning of future deer management programs.

Deer are transferred from the main trap to this portable trap for loading into the truck. Ten different areas throughout Louisiana will receive trapped deer this year.

LOUISIANA

MALLARD

Anas platyrhynchos

Probably the most abundant of the world's ducks, the mallard is a familiar sight throughout most of the Northern Hemisphere. Highly prized by the waterfowl hunter, the mallard is considered THE wild duck throughout most of the country.

Mallards are as much at home on city park ponds and in the barnyard as they are on the marshes, lakes, and rivers in more remote areas. Crossing freely with other species of ducks and readily adaptable to domestication, the mallard has given rise to most of the familiar breeds of domestic ducks we know today.

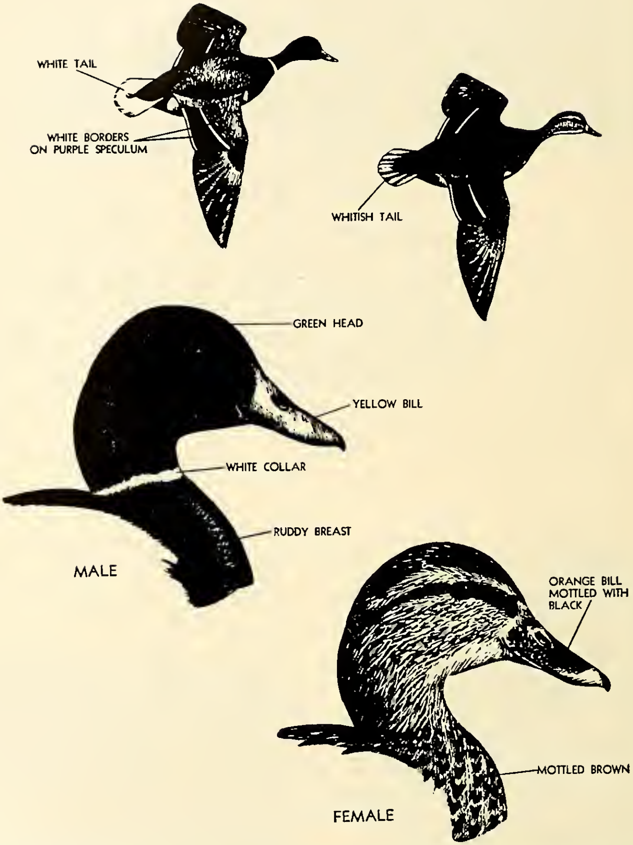
The adult male or drake is a strikingly beautiful bird with a head and neck of rich iridescent green. At the base of the neck there is a narrow white collar. The bill is yellow or greenish yellow, the feet reddish orange. The chest is a rich purple chestnut in color, the back brown, sides, breast, and belly, white with fine dusky vermiculations. The speculum or colored wing patch is an iridescent purplish blue, bordered in front and behind with black and white bars and on the inward side with black.

The adult female is buffy with much streaking of dark brown. The bill is orange to greenish olive with darker blotches. The speculum is the same as the drake's.

The main breeding range extends from the northern United States northward into Alaska and northern Canada in the western half of the continent and in the Great Lakes region farther east. The species winters over much of the United States where open water prevails, and southward into Mexico.

MALLARD

(Anas platyrhynchos)



HURRICANE DAMAGE

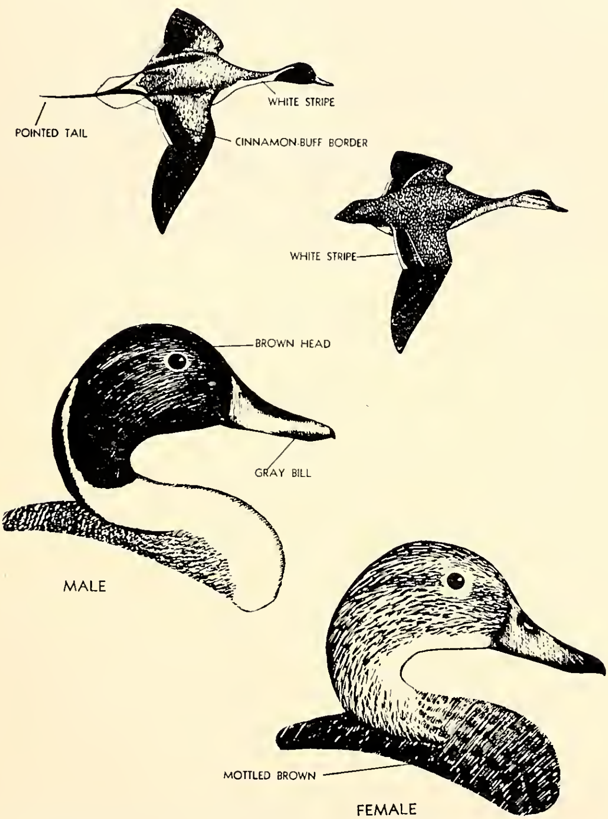
Continued from page 13

this area this season, the fur management men predict and they also predict a decrease in the nutria population, especially in the west Vermilion Bay area, although ample quantities should be trappable.

The price the Louisiaan trapper will get for his crop this year apparently will be higher than last year. When the top price for nutria was $1.35 per pelt, with $1.00 average for the entire state, last year the Louisiana trappers harvested 1,821,840 muskrats for which they received a total of $1,457,472; they took 57,142 mink which brought them $628,562; the raccoon catch was $61,520, for a monetary value of $55,368; a total of 4,653 otters were taken and added $83,754 to the state's total; there were 6,211 opossum which brought only 15¢ per skin for a total of $931.65; fox, skunk and civet cat added approximately $125 more, making a grand total of $2,644,986.

With all the surveys and the estimates of fur experts at hand, those interested in Louisiana furs are still undecided as to whether the nutria will become a highly valued fur-bearing animal or a great nuisance. It is certain that the nutria population has increased amply in the last decade and the animal has spread great distances in south Louisiana's marsh country. A great many trappers have an embittered feeling toward the nutria principally because it requires an entirely different method of handling than they are accustomed to, but it has been proved that prime pelts of more than 20 inches in length are becoming increasingly popular in the fur manufacturing centers in the east, and some of the biggest wholesalers and retailers of fur garments are now advertising nutria fur capes, jackets and coats, as well as nutria lined and trimmed garments,

WATER FOWL



PINTAIL
(Anas acuta)

PINTAIL

Anas acuta

The pintail is one of the most widely known of American waterfowl. The male especially is a strikingly handsome bird with long, slender white neck contrasting with the brown head. The greatly elongated middle tail feathers give the species its common name. The mottled brown plumaged female resembles the mallard hen but the dark blue-gray bill and feet, the pointed wings, and the margin of white bordering the rear edge of the brownish iridescent speculum will identify the specimen as a pintail.

Among the earliest of the migrants to push southward from the breeding grounds in the fall, pintails spend the winter from southern New England southward through Louisiana, the Gulf coastal section, along the Pacific coast and through Mexico.

Pintails are alert ducks, springing vertically upward when they become alarmed and flying swiftly away from threatened danger. They decoy rather readily although their approach to a spread of decoys often involves a considerable amount of circling as they look the situation over from every angle until satisfied all is well.

Their swift flight, excellent table qualities, and response to decoys make them one of the most popular of the ducks with the continent's hunters.

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which have become exceedingly popular in the eastern style centers.

If the Louisiana trapper could be educated to the advantage of harvesting the available nutria and properly treating the skins, the conversion of this fur into popular garments is said to be almost certain. During his entire lifetime, however, the Louisiana trapper has concerned himself solely with muskrat, mink and otter for the value of its fur harvest and from childhood up, was taught the proper handling of these skins. As a consequence the great majority of them resent having to learn how to handle a new source of fur wealth, but as more and more of them show the lead of the Cameron Parish trappers in the proper method of harvesting nutria, it is felt that the threatened over balanced nutria population will be levelled off into a valuable asset for Louisiana's fur industry.

Forestry Problems Will Be Aired at LSU in April

Louisiana State University's School of Forestry will sponsor its Sixth Annual Forestry Symposium on the campus April 4 and 5, 1957, it was announced by Professor William C. Hopkins, general chairman of the conference.

The general theme of the symposium will be "Special Problems in Southern Forestry." Some 400 foresters, a number equal to last year's attendance, are expected for the event.

Plans call for three half-day sessions devoted to problems in three areas: forest and game; range and recreation; and insect and disease.

Professor Hopkins said early announcements of the program will be mailed this month (January) and final programs with pre-registration forms in March. Inquiries about the symposium may be addressed to Professor Hopkins, LSU School of Forestry, Baton Rouge, La.

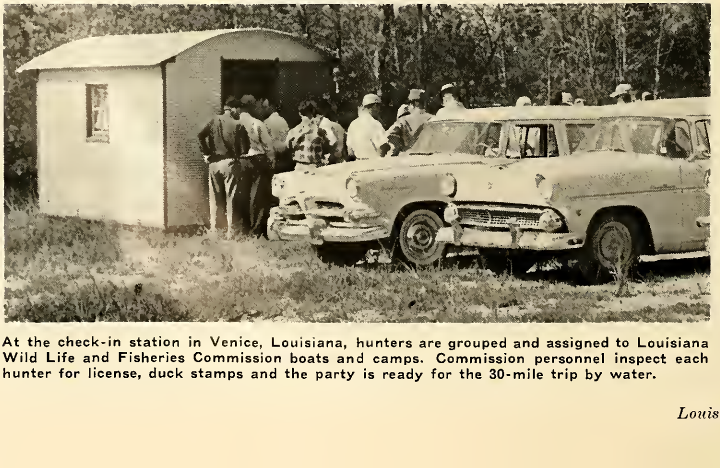
Pass-A-Loutre Public Shooting

by Ted Ford and Kenneth Smith

Two hundred sixty-one duck hunters from every section of the state averaged a daily kill of 2.6 percent at the Pass-A-Loutre public shooting grounds at the mouth of the Mississippi River during the first half of the migratory waterfowl season according to records of the Louisiana Wildlife and Fisheries commission. This compared with 1.9 percent state-wide average.

The majority of the selected hunters who made the first half season hunts at Pass-A-Loutre, were high in praise of the program. Their average daily bag of ducks consistently ran higher than the statewide kill.

During the first half of 1956-57 waterfowl season, ducks were fairly well distributed over the area. Many hunters admitted that they should have gotten their limit, but were just off in their shooting. In managing the area so as to keep ducks there, hunts have been arranged so that the ponds will be rested at least three full days each week. In addition, hunting is restricted to morning hours only, so that any ducks gun pressured out in the morning would come back into the ponds later in the day. It is thought that the use of this practice (one of our management tools) as well as assigning a large



At the check-in station in Venice, Louisiana, hunters are grouped and assigned to Louisiana Wild Life and Fisheries Commission boats and camps. Commission personnel inspect each hunter for license, duck stamps and the party is ready for the 30-mile trip by water.

hunting area to each camp group contributes to better hunting.

Hunter bag checks for the Pass-A-Loutre area indicate that a total of 1,356 ducks, 20 blue and snow geese, and 178 coots, were killed at the public hunting camps. In regard to the small number of geese killed, it should be pointed out that these are incidental kills of stragglers. Relatively few of the geese available around the camp areas, for most of them are found on the mud flats bordering the Gulf of Mexico, and these areas are inaccessible from the camps.

The records of the species of ducks killed shows that the gadwall (grey duck) ranked top, amounting to 48% of the total bag. Second in number was the baldpate (widgeon) which made up 24% of the bag. Both of these species were found to be in an excellent condition.

Next in order, were the mallards and greenwing teal, each of which accounted for 6% of the bag. It was interesting to observe that the mallards poured into the area on the first morning of the second hunt, Thursday, November 8, following the first good cold front up the flyway. The number killed increased sharply following this movement. No migratory mallards were killed on the first two-day hunt. The greenwing teal were present in considerable numbers. Shovellers, pintail, bluewing teal, and all other species accounted for 16% of the bag.

Within two hours groups of eight hunters will be in their assigned camps. The long wait until early morning begins. The first evening will seem even shorter because of tall tales and black coffee.

Making sure that nothing is left behind, hunters load the boat "Tarpon" with guns, ammunition, groceries, ice, bedding and many other items that may be needed for the two-day stay at the "waterfowl paradise".

Perhaps you are wondering how hunters are selected and how many hunters had the opportunity to go down to this area. A selection of hunters is made by drawing numbers. When applications are received, they are numbered consecutively. Following the application closing date, a representative of the Louisiana Wildlife Federation, assists commission personnel by drawing numbers. These numbers which have been placed in a hat correspond to all application numbers. After 72 hunters were selected for the hunt, a group of alternate hunters are also selected who will have the opportunity of making a hunt if any cancellations occur.

For the first part of the season, there were 549 applicants. Of these, 360 hunters were selected and notified. Due to cancellations, an additional 47 hunters were notified. Finally, 265 permits were issued, and 261 hunters were able to make the trip. Thus, there were 98½% of the hunters who paid $10.00 for their two-day permit making the trip.

A trend is indicated by these percentages. Essentially all of those who make up their minds and purchase their permits immediately following notification of their selection do make the trip. Some permits are transferred due to last minute illnesses or business matters that cannot be postponed. It is obvious that the loss of use of permits is slight when only four or 1½% of 265 permits issued were not used.

The number of applicants from the different sections of the state was of interest. As was expected, the majority of applicants were from the Greater New Orleans (275) and Greater Baton Rouge (192) areas. However, there were 56 applicants from the Amite area, 22 from the Shreveport area, and four from Marksville.

Following the receipt of money for the selected hunters' permits, a notice is included with the permits that are mailed to these people. One item is especially interesting—it relates to fishing. All of the Pass-A-Loutre camps are located along the passes, and fishing is available in front of each camp. Some of the hunters have returned home with their limits of ducks

This is the final reward of the little trouble; each hunter with a limit of ducks and back in the camp area before most men are at work in the city. The pleasant weather of the Louisiana marshland provides a spring-like atmosphere.

as well as a nice catch of drums, sheepshead, river catfish, speckled trout or redfish. Many of the hunters told us that this is an excellent way to spend the afternoon hours. It is necessary, however, to bring bait, such as frozen shrimp.

Another aspect of the commission's program for the Pass-A-Loutre public shooting grounds area was opening a part of the area to permit hunting for those who could provide their own facilities. To meet these needs, more than 20,000 acres of water and marsh in the Blind Bay and Redfish Bay areas were made available for the first time this year. Permits were issued to individuals for four-day periods, with no limit on the number of permits. It was surprising to learn of the interest in this area by people operating speed hulls as well as large boats. A total of 548 permits have been issued to 121 hunters at the time of this report.

In conclusion, it is gratifying to report that there were no serious accidents. An outboard motor boat is provided at each camp, however, for emergency use, such as bringing an injured hunter to the main camp for additional first aid treatment and transfer to better facilities. The hunters have, in most instances, left the cabins and cooking utensils in good condition for the following group. Thus far, all groups have been transported to their camps early enough in the afternoon to find or build blinds for their first morning's hunt.

"This two-day trip, away from the fast, everyday routine, would have been worth the time from my business and more than the permit fee even if I had not killed a single duck", said many of the hunters.

Here a group of waterfowl hunters pose on the steps of Bolunt's Point camp, one of the nine cabins in use during the first half of the 1956-57 waterfowl season at Pass-a-Loutre public shooting area. Reading from top to bottom, left to right: G. C. Elexius, Covington; W. A. Hood, New Orleans; R. A. Orial, New Orleans; R. C. Hammond, New Orleans; E. J. Cowen, New Orleans; D. K. Patterson, Metairie; Guy Banister, New Orleans; and Ross Banister of Baton Rouge.

Now comes the long trip home; some of the hunters have their two-day limit of eight ducks dressed and drawn and iced away. Others may not have been so fortunate and had to settle for less, but the majority will vouch for the thousands of waterfowl in the Pass-A-Loutre public shooting area at the mouth of the Mississippi.

Louisiana Hunting Regulations For 1956-1957

Resident Game Birds and Animals

BOBWHITE: December 1, 1956-February 10, 1957, inclusive. Daily bag limit 10, possession limit 20. Season limit 80.

WILD TURKEY: Closed.

SQUIRREL: October 19, 1956-January 5, 1957, inclusive. Daily bag 8.

RABBIT: October 19, 1956-February 10, 1957, inclusive. Daily bag 5.

BEAR: Closed.

DEER: November 15, 1956-January 1, 1957, inclusive.

Ascension, Jefferson, St. Charles, St. James, St. John, Livingston. South of Highway 190 open, North of Highway 190 closed. Tangipahoa: Open South of Highway 190, North of Highway 190 closed.

DEER: December 1, 1956-January 10, 1957, inclusive.

Assumption, Iberia, Iberville, Lafourche, Plaquemines, Pointe Coupee, St. Bernard, St. Martin, St. Mary, St. Tammany, Terrebonne, Vermilion and West Baton Rouge. East Baton Rouge: South of Highway 190 open, North of Highway 190 closed. St. Landry: Closed that part of Ward 4 bounded on the north by the T. & P. Railroad, on the south by the Missouri-Pacific Railroad at Krotz Springs, on the west by Guide Line Levee, and on the east by the Atchafalaya River.

DEER: December 1, 1956-January 1, 1957, inclusive.

Concordia, East Carroll, Franklin, Madison, Morehouse, Tensas and West Carroll.

Avoyelles: Except that portion of Ward 1 from the Moncla-Archie Highway west to the Rapides Parish Line which will be closed.

Beauregard: East of Highway 27 (104) closed. West of Highway 27 (104) open.

Calcasieu: East of Highway 27 (104) closed. West of Highway 27 (104) open.

Catahoula: North of Highway 84 and west of Boeuf River and Ouachita River will be closed.

Grant: Open except that part East of Highway 165.

LaSalle: Closed except Ward 6 which will be open.

Natchitoches: Only the following described areas open to deer hunting: Those parts of Wards 6, 7 and 8 east of Hagewood, Provencal, Bellewood, Kisatchie, Leesville Highway La. 117 (or Coldwater Road) and North of the Kisatchie, Mink, Gorum Road La. 118 and outside the Red Dirt Game Preserve. That part of Ward 1 South of Highway 6 between Hagewood and Natchitoches. Ward 9 except that part lying in the Red Dirt Game Preserve. Ward 10, West of Derry, Gorum Road, Except that part lying in the Red Dirt Game Preserve.

Orleans: Closed except Ward 15, area bounded by Cutoff Road, Ammunition Dump fence, Mississippi River and Plaquemines Parish line will be open.

Union: Open except area west of Missouri-Pacific Railroad to Litroe, Dean, Hailes, Spencer and Sterlington which will be closed.

Vernon: Open except area east of Highway 171 which will be closed.

West Feliciana: Closed except Turnbull Island which will be open.

Winn: Open except that part Northwest of Highway 84 from Clarence to Winnfield and West of Highway 167 from Winnfield to the Jackson Parish line.

DEER: December 1, 1956-December 5, 1956, inclusive.

Sabine: Only that part of Sabine Parish described below will be open to deer hunting: West of a line from Vernon Parish line north on U. S. Highway 171 to Florien, thence west on La. Highway 474 (old 537) to Dess and on to junction of Many, Negreet Highway La. 476 (old 536); north to Many, Negreet Road to junction of La. Highway 6 and thence southwest to junction of Zwolle, Alliance Highway La. 475 (old 143), thence to Zwolle and north on U. S. Highway 171 to DeSoto Parish line.

DEER: December 1, 1956-December 7, 1956, inclusive.

Jackson, Claiborne: Only that part of parish between Highway 79 from Homer to the Arkansas line and Highway 9 from Homer to Arkansas line shall be open to deer hunting.

Migratory Water Fowl Season 1956-57

DUCKS: November 1, 1956-November 25, 1956, inclusive. December 7, 1956-January 13, 1957, inclusive.

Shooting hours: ½ hour before sunrise to ½ hour before sunset including opening day. Bag limit 4. Possession limit 8.

WOODDUCK: Closed.

Merganser: Only one hooded merganser may be included in the bag limit of 4 or possession limit of 8. Red-breasted and American mergansers are to be included in the daily bag possession limits.

GEESE: November 1, 1956-November 25, 1956, inclusive. December 7, 1956-January 13, 1957, inclusive.

Shooting hours: Same as for ducks. Bag limit 5. Possession limit 5. Not to include more than 2 Canada geese or its subspecies, or 2 white fronted (Speckle Belly) geese or one of each.

COOTS: November 1, 1956-November 25, 1956, inclusive. December 7, 1956-January 13, 1957, inclusive.

Shooting hours: same as ducks and geese. Bag limit 10. Possession limit 10.

RAILS and GALLINULES: October 1, 1956-December 9, 1956, inclusive. Bag 15 (except Sora Rail which is 25).

WOODCOCK: December 12, 1956-January 20, 1957, inclusive. Bag limit 4.

DOVE: September 21, 1956-October 5, 1956, inclusive. December 1, 1956-January 9, 1957, inclusive. Bag limit 8. Shooting hours: 12 noon until sunset.

WILSON SNIPE (JackSnipe): December 13, 1956-January 11, 1957, inclusive. Shooting hours: To be announced later. Bag limit 8. Possession limit 8.

Use of bait and live decoys prohibited. Hunters of ducks and geese who are over 16 years of age must have a federal waterfowl stamp attached to their state hunting license or old age permits. These may be obtained from U. S. Postoffice. Use of rifles, or shotguns larger than 10 gauge or capable of holding more than three shells, prohibited. The plug used in guns must be incapable of being removed without disassembling gun. Legal possession limits of resident game birds or game animals may be possessed up to within 30 days of the opening of the following season.

Licenses

HUNTING LICENSE, RESIDENT (Required of all residents between the age of 16 and 60. Those over 60 must have old-age premit.)	$ 1.00
HUNTING LICENSE, NON-RESIDENT (Required of all non-residents, except those under 16 years of age.)	Reciprocal with other states
TRAPPING LICENSE (Trapping seasons to be announced. Only residents permitted to trap.)	$ 2.00
FUR BUYER, RESIDENT	$ 25.00
FUR BUYER, NON-RESIDENT	$ 100.00
FUR DEALER, RESIDENT (Deposit $500.00 required)	$ 150.00
FUR DEALER, NON-RESIDENT (Deposit $1,000.00 required)	$ 300.00

The bird dog is a prized possession of Louisiana's outdoorsmen. *(Photo by Mack Avants)*